Next Generation 911: What It Is – and Why Sheriffs Should Care

Making the move to an upgraded 911 system will have powerful benefits for law enforcement.

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The current 911 system, on which the American public relies every day, is more than 40 years old. It has largely served both citizens and law enforcement well, but, simply put, the telephony system that supports emergency calls is clearly out-of-date – and sometimes its age can prove disastrous: When Hurricane Katrina hit, some 38 emergency call centers were unable to function during the storm and in its immediate aftermath.

Experts across industries, including those in law enforcement, agree that making the transition to what’s called Next Generation 911 – or NG911 – isn’t an “if”; it’s a “when.” As I watch, for example, the shift from landline 911 calls to wireless calls – which currently total about 75 percent of our calls in Erie County, about the national average – I couldn’t agree more: The time for NG911 has come, and I believe that sheriffs need to lead the conversation about how best to implement it. Fortunately, more of our colleagues are seeing the way forward: Several states, counties, cities around the U.S. have begun testing pilot NG911 programs – for instance, allowing citizens to text 911 for help rather than call – and a few have even gone on to put a new next-generation system in place. Vermont became the first state to implement a state-wide NG911 system, and when Hurricane Irene struck in August 2011 their PSAPs were ready and not a single call was lost, even when one call center had to be evacuated.

Unfortunately, in general we in law enforcement haven’t been as quick to act on NG911 as we should have been. Many sheriffs haven’t yet paid attention to the train coming down the track. Other organizations – especially the National Emergency Number Association (NENA; nena.org), the Association of Public-Safety Communication Officials (APCO; apco911.org), the FCC, and several others – are making progress in a big undertaking that will lead the national migration to NG911. They’re doing so because they see the tremendous benefits this upgrade will have for law enforcement, other emergency services providers, and the public. Vendors, too, are creating products, software, and equipment to make the switch possible, easier, and more cost-effective. What’s missing is the active participation of law enforcement as a community: We need to talk about NG911, understand what it is and what it can do for our agencies in particular, share best practices, and begin the process of upgrading from our outdated legacy system to a new system that can do much more.

Last year, I was part of a working committee of law enforcement leaders convened by the Transportation Safety Advancement Group (TSAG; tsag-its.org) to look specifically at NG911 for law enforcement and to talk about both its challenges and benefits for our profession. In short, the future looks bright – but it requires the active participation of sheriffs if we want to have a NG911 system that works to meet our particular challenges and maximizes the benefits to our deputies and the communities we serve.

So What Is NG911, Exactly?

Every agency will eventually need to make the switch to Next Generation 911, but it will be executed at the local level (state, county, city, and tribal/native nations). It is, at its simplest, a shift away from legacy telephony systems for receiving and processing 911 calls and dispatching first responders. Most sheriffs’ departments, like the rest of law enforcement, will typically start their NG911 upgrade by putting in place a new backbone for the system – an infra-
structure of what’s called an ESInet, or Emergency Services Internet Protocol Network – which functions a lot like the Internet we use every day.

This internet, though, is specifically designed to support emergency services and it will eventually make it much easier for deputies to get more and better information when they need it most, including text messages, video footage, photos, and location (GPS) data about incidents, crimes, victims, and perpetrators. The NG911 system will be much more reliable too, in the event of a natural disaster or other emergency, and it will be able to accept, process, store, and share other data. Because NG911 operates on a system specially designed for emergency services, it also means that sharing and receiving information from those in fire-rescue, transportation, hospitals, ambulance services, and your counterparts in other jurisdictions will be a lot easier once everyone has made the switch.

Where Sheriffs and Deputies Fit In

Sheriffs clearly have a very important place at the table of Next Generation 911. After all, most PSAPs around the country are run by sheriff’s offices or police departments. So it will still largely be sheriffs, deputies, or other law enforcement, who will be dispatched when a 911 “call” comes in – even if that means the “call” is actually a text, video, or photo received by the PSAP call-taker. Sheriffs need to pay attention to the NG911 migration because if you are the one managing the PSAPs in your area there will soon be an expectation that you are also managing this transition and especially ensuring that the necessary funds are used appropriately for upgrading call centers and other NG911 expenses – and not diverted to pay for other things. To be blunt, you can be part of the solution – or you’re going to get run over by the solution.

The upside is that if law enforcement has great responsibility in making NG911 happen, it also perhaps stands to gain the most. In the TSAG report we spelled out some of the most likely benefits for sheriffs, deputies, and other law enforcement officials. The first and among the most important benefits we expect to see is an increase in deputy safety. Picture this: A deputy performs a traffic stop and, thanks to an upgraded emergency-services system, is automatically sent data showing that the car’s registered owner is a suspected gang member with a violent history. The deputy can’t see through the car’s tinted windows, but telematics data reveals there are four occupants in the vehicle. Based on this information, the deputy treats the stop as a felony traffic stop per department protocol. Since sheriffs and their deputies are, of course, more likely to handle rural areas, a deputy may be alone when responding to a call; backup may be 15, 20, or more minutes away. So it’s truly a life-or-death matter for these deputies to receive as much information as possible so that when they arrive on the scene they have a better understanding of what’s happening.

Or, let’s say a liquor store is being robbed at gunpoint. The clerk uses his cell-phone video camera to record the thief’s vehicle as it exits the parking lot, and then forwards the video recording to a PSAP, where it’s immediately shared with responding units. The recording is used by investigators to help identify the suspect and later is used as evidence in court, hopefully leading to a successful prosecution.

Just as important, the public stands to benefit greatly from a migration to NG911, especially underserved communities like the deaf and hearing-impaired, the disabled, the elderly, and those in rural areas. Let’s say that a hard-of-hearing senior citizen is at home alone in a wheelchair. She is able to use TTY to reach a PSAP operator quickly and efficiently in an emergency, thanks to an NG911 system. Being able to text to 911 – rather than call – could save someone in a situation where talking on the phone would endanger their life.

What’s Next?

If you’re ready to move ahead on NG911, start by reading TSAG’s “Next Generation 9-1-1 What’s Next Forum” report (tsag-its.org/projects/nextgen911.php) for a great overview. Then make sure that your county legislature, board of commissioners or supervisors, or other county or local government is aware of Next Generation 911. Because they control the purse strings, you will likely need to educate them that NG911 is coming and because sheriffs are so often responsible for PSAPs, it falls to us to prepare and begin the process of upgrading our equipment. We all want to be able to receive texts, photos, videos –

TERMS TO KNOW

**ESInet:** Emergency Services Internet Protocol Network

**IP:** Internet Protocol

**NG911:** Next Generation 911

**PSAP:** Public Safety Answering Points
 anything that a phone can transmit. Currently, though, the only thing we can get is a phone number, and maybe location information. Once we have made the transition, the possibilities for NG911 truly are limitless. And while it can seem overwhelming to take on a new and complex initiative in these difficult economic times, keep in mind that Next Generation 911 really isn’t so different an idea. It reflects the way the citizens we serve are already communicating, after all. The NG911 “train,” as I say, is definitely coming down the track, which is why it’s crucial that sheriffs join – and lead – the conversation now.

Questions for Ed Hutchison -  What does NSA anticipate doing regarding NG911 in the near term and what are we comfortable discussing?  Will this article run before or after the conference, and is inclusion of the possibility of a draft resolution an option for this article?

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